CHAPTER

Continuing Reform of Medicare Payments to Physicians

# R E C O M M E N D A T I O N S

# To refine practice expense relative value units for the Medicare Fee Schedule, the Secretary of Health and Human Services should:

- **7A** Determine whether a clinical consensus exists about the appropriate settings in which services should be provided. For services that should not be provided in physicians' offices, the Secretary should set both the office and facility practice expense relative value units at the lower facility practice expense level.
- **7B** Use a service-by-service approach to decide which services are subject to a site-of-service differential.
- **7C** Include in the refinement process participants with expertise in payment methods, survey research, and accounting; representatives from the physician community; and payers other than Medicare.

# To prepare for implementation of new professional liability insurance expense relative value units, the Secretary should:

**7D** Consider the frequency of closed malpractice claims with payment, by service, as a basis for the relative value units. Such relative value units would reflect each service's risk of a malpractice claim and would be resource based.

## To improve the sustainable growth rate system, the Congress should:

- **7E** Revise the sustainable growth rate to include measures of changes in the composition of Medicare fee-for-service enrollment.
- **7F** Revise the sustainable growth rate to include a factor of growth in real gross domestic product per capita plus an allowance for cost increases due to improvements in medical capabilities and advancements in scientific technology.
- **7G** Amend a provision of the Balanced Budget Act of 1997 to require the Secretary to publish an estimate of conversion factor updates by March 31 of the year before their implementation.
- **7H** Reduce time lags between sustainable growth rate measurement periods by allowing calculation of the sustainable growth rate and update adjustment factors on a calendar year basis.
- **71** Require the Secretary to correct estimates used in sustainable growth rate system calculations every year.

CHAPTER

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implementing the new requirements for physician payments mandated by the Balanced Budget Act of 1997 raises a number of important questions. How should the Health Care Financing Administration decide which services are subject to a site-of-service payment differential? How should the agency proceed with refining practice expense relative value units during the transition to full implementation of resourcebased values in 2002? What is the best methodology for developing relative value units for professional liability insurance expense? How can the Congress improve the sustainable growth rate system to allow it to better accommodate changes in beneficiary use of services and to correct certain technical problems with the system? This chapter considers these questions and makes recommendations for ensuring that the changes mandated by the Balanced Budget Act are carried out effectively.

# In this chapter

- Making the transition to resource-based practice expense relative value units
- Developing relative value units for professional liability insurance expense
- Improving the sustainable growth rate system

This chapter addresses, first, implementation of resource-based practice expense relative value units (RVUs) in the Medicare Fee Schedule. The Health Care Financing Administration (HCFA) needs to make important decisions during a four-year transition period, which began on January 1, 1999, in order to implement these RVUs, as required by the Balanced Budget Act of 1997 (BBA). Some of those decisions concern a site-of-service differential, which reduces practice expense payments for certain services provided in settings other than physicians' offices. Other decisions pertain to refinement of the interim resource-based practice expense RVUs that HCFA is using during the transition. To assist HCFA with these decisions, the Medicare Payment Advisory Commission (MedPAC) has developed recommendations on the site-of-service differential and refinement of practice expense RVUs.

This chapter also considers HCFA's plans to implement resourcebased professional liability insurance (PLI) expense RVUs. HCFA is developing new PLI expense RVUs for implementation on January 1, 2000. MedPAC has prepared a recommendation on HCFA's methodology for developing the RVUs.

Finally, the chapter addresses ways the Congress could improve the sustainable growth rate system. Those improvements are of two types: modifying the system to allow it to better accommodate changes in beneficiary use of needed services; and addressing specific technical issues in order for the system to function as intended.

# Overview of Medicare Fee Schedule payments to physicians

The Medicare Fee Schedule, established under the Omnibus Budget Reconciliation Act of 1989 (OBRA89), is used to determine payment rates for each of the more than 7,000 services that physicians provide to beneficiaries. It is designed to be resource based. That is, if delivery of a service requires twice as many resources as delivery of another service, then its payment rate should be twice as high.

The fee schedule's measures of resource use are its relative value unit (RVUs). They correspond to three different types of resources used to provide physicians' services:

- physician work, including the time, intensity of effort, skill, and risk to the patient associated with each service,
- practice expense, including the cost of nonphysician staff, office space, equipment, and supplies,
- professional liability insurance (PLI) expense.

When OBRA89 was passed, a research project, conducted by William Hsiao and his colleagues at Harvard University, was underway to develop work RVUs. Completion of this project allowed implementation of resource-based work RVUs when the fee schedule was introduced in 1992. Since estimates of the practice expense and PLI expense associated with each service were not available in 1992, RVUs for those two components of provisions in the fee schedule were based on historical charges, as a temporary measure.

Implementation of provisions in the Balanced Budget Act of 1997 concerning practice expense and PLI expense will make the fee schedule fully resource based.

Each service has a total relative value which is the sum of its work, practice expense, and PLI expense RVUs. On average, a service's total RVUs are distributed across the three components of the fee schedule as follows: work, 54.5 percent; practice expense, 42.3 percent; and PLI expense, 3.2 percent.

When payment rates are calculated, RVUs are adjusted for geographic differences in practice costs with geographic practice cost indexes (GPCIs). These GPCIs vary according to payment localities identified by the Health Care Financing Administration. There are 89 payment localities at present. Generally conforming to state boundaries, they often include entire states. When a state includes multiple localities, its larger metropolitan areas are usually assigned to one or more localities and the rest of the state forms a separate locality.

The actual payment amount for a service is produced by multiplying its adjusted RVUs by a dollar conversion factor. The conversion factor is updated annually under the sustainable growth rate system. That system allows for updates that reflect medical inflation, changes in Medicare fee-for-service enrollment, growth in the economy, and changes in spending due to changes in law and regulations.

# Making the transition to resource-based practice expense relative value units

HCFA will refine resource-based practice expense RVUs during a four-year phasein period that will end in 2002. To refine the RVUs, the agency plans to address two sets of issues:

- limitations of the service-specific data used to develop practice expense RVUs, and
- broad technical and methodological issues.

## Service-specific data issues

In developing practice expense RVUs, HCFA relies on data from Clinical Practice Expert Panels (CPEPs) for the estimation of the direct costs of providing specific services. Those costs include salaries of nonphysician clinical staff and the costs of medical supplies and equipment. Data on the time physicians spend providing specific services are also used.

Both HCFA and physicians' organizations have raised questions about the validity of these service-specific data. HCFA has found inconsistencies in the data as it has developed the practice expense RVUs, and the agency has received numerous comments from physicians' organizations and others about problems with the data.

In comments on a proposed rule published by HCFA in June 1998, MedPAC addressed the need to refine service-specific data (MedPAC 1998). The Commission recommended a role for the American Medical Association's (AMA) Relative Value Scale Update Committee (RUC) or a similar organization in the review of the data.

This recommendation is now being carried out. The RUC has established a Practice Expense Advisory Committee (PEAC) that will address service-specific data and other issues. The PEAC will include physicians as well as

representatives from a range of nonphysician groups such as the American Nurses Association, the American Academy of Physician Assistants, and the Medical Group Management Association. Given the organizations represented, the PEAC should be able to play a key role in refining service-specific data.

# Technical and methodological issues

In addition to service-specific data issues, HCFA also anticipates considering broader technical and methodological issues. As listed in the Medicare Fee Schedule final rule for 1999 (HCFA 1998a), these issues include:

- possible bias in the practice expense methodology in favor of high revenue specialties,
- validation of physicians' selfreported aggregate practice cost data from the AMA's Socioeconomic Monitoring System (SMS) survey,
- criteria for using data other than those from the SMS survey, and
- allocation of indirect expenses to specific services based on factors other than physician work and direct expenses.

Other technical and methodological issues are also discussed in the final rule. For example, the rule describes several issues related to HCFA's site-of-service differential policy that need to be addressed during refinement. Additionally, HCFA remains interested in establishing a policy, originally proposed in June 1997, to reduce practice expense payments for services provided in conjunction with an office visit. While MedPAC recommended against this policy, as originally proposed, further consideration of the issue during refinement would be appropriate.

The following sections address our recommendations on HCFA's site-ofservice differential policy and the more general issue of how HCFA should proceed with the refinement process.

Site-of-service differential. Medicare's physician payment policies include a siteof-service differential that reduces practice expense payments for services provided in facility settings, such as hospital outpatient departments and ambulatory surgical centers. The differential recognizes that physicians' practice costs are generally lower when services are provided outside of the office setting. It attempts to avoid duplicating facility payments with practice expense payments to physicians.

Before 1999, the site-of-service differential applied to a group of about 700 services routinely provided in physicians' offices, including office visits, eye examinations, and some endoscopic procedures. Practice expense payments for those services were reduced by 50 percent if they were provided in facility settings.

The site-of-service differential policy changed in 1999 when the transition to resource-based practice expense RVUs began. As the new RVUs are phased in through 2002, the uniform 50 percent differential is being replaced with servicespecific differentials that are based on the CPEP data. In some cases, the differences between payment rates for services provided in an office compared to services provided in a facility will become larger. For example, the physician payment rates for a frequently provided joint procedure (code 20610) were, in 1998, \$47.33 in an office and \$39.07 in a facility. If the new resource-based practice expense RVUs were fully implemented in 1999, the payment rates for this service would be \$84.74 in an office and \$44.11 in a facility. For other services, such as visits provided in offices and hospital outpatient departments, the difference between office and facility payment rates will remain the same or become smaller.

Several issues pertaining to the new site-of-service differential policy remain unresolved. Based on comments HCFA received on the new policy, the most important issue concerns the appropriateness of providing certain services in physicians' offices instead of hospital outpatient departments and other facilities. Some gastrointestinal endoscopic services have received much attention in this regard.

In their comments on HCFA's June 1998 proposed rule on practice expense RVUs, gastroenterologists said these services should not have different practice expense RVUs for the office and facility settings because it is unsafe to provide these services in an office. They were also concerned that different RVUs could create an incentive for delivering the services in the inappropriate office setting. Finally, the gastroenterologists stated that HCFA is not authorized to have different payment levels for different settings.

HCFA's response to these concerns was that the agency was not aware of any studies showing that gastrointestinal endoscopy services are being unsafely performed in offices. HCFA also cited its confidence that physicians will continue to exercise their best clinical judgment as to the most appropriate setting for their patients. On the issue of different RVUs for different settings, HCFA indicated that different RVUs should not create incentives favoring one setting over another as long as the differences in RVUs reflect differences in practice costs. Finally, HCFA stated that it is required to develop resource-based practice expense RVUs that reflect cost differences among services. Data indicate that physicians' practice costs are higher in the office setting than in facility settings.

HCFA proposes to further address site-of-service differential issues during the refinement process.

### RECOMMENDATION 7A

To refine practice expense RVUs for the Medicare Fee Schedule, the Secretary of Health and Human Services should determine whether a clinical consensus exists about the appropriate settings in which services should be provided. For services that should not be provided in physicians' offices, the Secretary should set both the office and facility practice

# expense RVUs at the lower facility practice expense RVU level.

To date, HCFA has made decisions about which services are subject to the site-of-service differential based on utilization data. Before 1999, the differential was applied to services that were provided at least 50 percent of the time in physicians' offices. Under the new site-of-service differential policy, HCFA has generally developed distinct office and facility practice expense RVUs for services provided at least 10 percent of the time in each type of setting.

To help ensure patient safety, the process for deciding which services are subject to the site-of-service differential should be revisited during the refinement process. Clinical criteria should be considered during this process. Where appropriate, decisions regarding the applicability of the site-of-service differential should reflect a clinical consensus about the settings in which specific services should be provided.

Given concerns about the site-ofservice differential and patient safety, the Commission believes these issues should receive careful consideration as early as possible during the refinement process. Furthermore, the list of services subject to the site-of-service differential will require periodic review as standards of medical practice change. MedPAC believes the list should be reviewed every two years.

Pending decisions about the services subject to the site-of-service differential, monitoring of changes in beneficiary use of services by site will be necessary. MedPAC intends to integrate such monitoring with its work on changes in beneficiary use of services. Its focus will be on gastrointestinal endoscopy services and other services most affected by the new site-of-service differential policy. If there are changes in use of services by site, the Commission will explore ways of monitoring the quality of those services.<sup>2</sup>

### RECOMMENDATION 7B

To refine practice expense RVUs for the Medicare Fee Schedule, the Secretary should use a service-by-service approach to decide which services are subject to a site-of-service differential.

HCFA's fee schedule final rule for 1999 implies that there are two approaches to deciding on the applicability of the site-of-service differential to specific services. In the case of gastrointestinal endoscopy services, the rule addresses a range of services (codes 43234 through 45385). In the case of a group of urology services, however, the rule is very specific and identifies six individual codes within a range of urology services that should be considered during refinement.

Service-specific decisions about the applicability of the site-of-service differential is consistent with current medical practice, as illustrated by gastrointestinal endoscopy services (see Table 7-1). While these services are usually provided in settings other than a physician's office, diagnostic sigmoidoscopy is an exception. Over 70 percent of diagnostic sigmoidoscopies are provided in physicians' offices. Decisions about site-of-service differentials should be consistent with such variation in practice patterns within ranges of services.

Refinement process. In contrast with service-specific data issues, which will be addressed by comments from the RUC and the PEAC, HCFA has no clearly identifiable source of comments and suggestions on the broad range of technical and methodological issues that must also be addressed. For the refinement process to address this latter set of issues successfully, HCFA will need participants in the process with the necessary skills and expertise, such as economists, researchers, and accountants.

<sup>1</sup> In 1996, the differential was extended to include services on the ambulatory surgical center covered list of procedures.

In the case of gastrointestinal endoscopy services, complication rates by site of service can be monitored with Medicare claims data. Complications of these services include perforation, hemorrhage, and nosocomial infection (Agency for Health Care Policy and Research 1998).

### Provision of the top five gastrointestinal endoscopy services by site of service, 1997

HCPCS Code	Service	Site of Service	Frequency
43239	Upper GI endoscopy with biopsy	Office	5.1%
		Inpatient	34.6
		OPD	49.7
		ASC and other	10.6
45378	Diagnostic colonoscopy	Office	5.9
		Inpatient	25.4
		OPD	58.0
		ASC and other	10.6
45330	Diagnostic sigmoidoscopy	Office	71.3
		Inpatient	8.7
		OPD	17.5
		ASC and other	2.5
43235	Upper GI endoscopy, without biopsy	Office	3.9
		Inpatient	51.0
		OPD	38.7
		ASC and other	6.4
45385	Colonoscopy with lesion removal	Office	5.1
10000	colonicacopy with leasen remeval	Inpatient	16.0
		OPD	65.4
		ASC and other	13.5

Note: Data are for the first six months of the year. OPD (outpatient department). ASC (ambulatory surgical center). GI (gastrointestinal)

Source: MedPAC analysis of 1997 Medicare claims, 5 percent sample of beneficiaries

## RECOMMENDATION 7C

To refine practice expense RVUs for the Medicare Fee Schedule, the Secretary should include in the refinement process participants with expertise in payment methods, survey research, and accounting; representatives from the physician community; and payers other than Medicare.

The technical and methodological issues discussed in HCFA's final rule span a broad range. They include payment methods, survey research, and accounting. While HCFA has much of this expertise in-house, resources from outside the agency will probably also be needed. Since payers other than Medicare use the fee schedule's RVUs, representation of those payers may also be appropriate.

Survey research expertise will be particularly important during the refinement process. As discussed in detail in the Commission's comments on the June 1998 proposed rule, additional data, like that from the AMA's Socioeconomic Monitoring System survey, will be needed to refine the practice expense RVUs. The involvement of survey research experts will be valuable during this process.

# Developing relative value units for professional liability insurance expense

While payments for PLI expenses are a small share of total fee schedule payments (3.2 percent), they remain an

important part of Medicare's payments to physicians. For certain services, PLI expense payments are 10 percent or more of the total. PLI expense RVUs for spinal laminectomy (code 63047), for example, are 12.1 percent of total RVUs.

# **Progress toward** implementing resourcebased RVUs

HCFA is now working with a private contractor to develop resource-based PLI expense RVUs. The contractor may use a basic methodology provided by HCFA or may develop a different methodology. In either case, the contractor is expected to complete work in time for release of a proposed rule in June 1999 and implementation of the RVUs on January 1, 2000.

The Commission is concerned that application of the basic methodology provided to the HCFA contractor will not produce RVUs that are fully resource based. Briefly, the methodology would base RVUs on a premium index that varies among physician specialties or groups of specialties. This index would be a weighted average of state or local premiums for a standard professional liability insurance policy. PLI expense RVUs would be a weighted average of the values of the index, adjusted for budget neutrality, across the physician specialties providing each service. The only source of variation in the RVUs would be physician specialty. For a group of services provided by only one specialty, all the services would be assigned the same PLI expense RVU weight.

# An alternative methodology for developing the RVUs

The Commission is aware that other methodologies, in addition to the one provided to the HCFA contactor, will be considered during development of new PLI expense RVUs. The Commission believes these methodologies should address differences in PLI expenses not only by specialty but also by service.3

Brennan and colleagues (1993) provides an example of early research on variation in PLI expenses by service, measured in terms of the risk of a malpractice claim.

### RECOMMENDATION 7D

To prepare for implementation of new PLI expense RVUs, the Secretary should consider the frequency of closed malpractice claims with payment, by service, as a basis for the RVUs. Such RVUs would reflect each service's risk of a malpractice claim and would be resource based.

The PLI expense RVUs by service could reflect the frequency of closed professional liability claims with payment or claims payout by service. The Commission has a preference for frequency of claims because the RVUs would be less vulnerable to outliers and because claims payout does not reflect uninsured costs to the physician, such as loss of reputation and time to defend a claim. If PLI expense RVUs do not reflect variation in claims by service, physicians will have an incentive to provide some services more than others.

# Improving the sustainable growth rate system

For this report, the Commission considers improvements for the sustainable growth rate (SGR) system. We recommend that the system be modified to accommodate more fully changes in beneficiary use of needed services. We also address two technical issues related to SGR system calculations:

- mismatches of time periods, and
- correction of estimates.

Broader SGR issues, including extension of the SGR system to providers other than physicians, such as hospital outpatient departments and ambulatory surgical centers, are addressed in Chapter 6.

# The sustainable growth rate system

Inder the sustainable growth rate system (SGR), conversion factor updates are determined by the Medicare Economic Index (MEI) and an update adjustment factor.

Medicare Economic Index. The MEI measures changes in the prices of various inputs used to produce physicians' services. Those inputs include physicians' earnings, staff salaries, supplies, equipment, and professional liability insurance. The base year for the index is 1996. Data used to calculate the MEI come from a variety of sources, including the Socioeconomic Monitoring System survey, conducted by the American Medical Association, and the Employment Cost Index, from the Bureau of Labor Statistics.

According to the MEI, increases in physicians' input prices have slowed in recent years. From 1985 to 1992, the MEI increased at an average annual rate of 3.1 percent, with increases in the index ranging from 2.7 percent to 3.5 percent (HCFA 1998a). Since then, the MEI has increased at an average annual rate of 2.1 percent, with the increases ranging from 1.8 percent to 2.3 percent.

### Update adjustment factor.

Calculation of the update adjustment factor requires comparing Medicare's cumulative actual fee-for-service spending for physicians' services since a base year (1997) to cumulative allowed spending for that same period. Allowed spending is calculated as 1997 base year spending, projected forward by the sustainable growth rate. If actual spending was more than allowed spending, the update adjustment factor reduces the conversion factor to recoup the difference. If actual spending was less than allowed spending, the update

adjustment factor increases the conversion factor.<sup>4</sup>

Four factors make up the sustainable growth rate:

- the percentage increase in fees for physicians' services,
- the percentage change in Part B enrollees (excluding those enrolled in Medicare+Choice plans),
- the projected growth in real gross domestic product (GDP) per capita, and
- the percentage change in spending for physicians' services resulting from changes in law and regulations (but not due to changes resulting from the update adjustment factor).

The real gross domestic product (GDP) per capita factor in the sustainable growth rate is a key element of the system. Given the other factors in the SGR, the real GDP per capita factor allows spending to grow to accommodate increases in the volume and intensity of services that beneficiaries receive, but only at a rate supported by growth in national income. The factor is intended to achieve a balance between necessary growth in the volume and intensity of services and affordability of Medicare's spending for physicians' services.

Before passage of the Balanced Budget Act of 1997 (BBA), one of MedPAC's predecessor commissions, the Physician Payment Review Commission, recommended an SGR system with a factor of growth in real GDP per capita plus 1 or 2 percentage points. This recommendation was based on Medicare's experience with growth in

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<sup>4</sup> The comparison of cumulative actual and allowed spending since a base year is one of the differences between the sustainable growth rate system and the volume performance standard (VPS) system that it replaced. The VPS system was designed to control annual spending growth only and not cumulative spending.

# The sustainable growth rate system

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the volume and intensity of physicians' services provided to beneficiaries (PPRC 1997). In 1990, when Physician Payment Review Commission (PPRC) first recommended linking growth in physician payments to growth in GDP, volume and intensity growth exceeded real GDP growth by 4 to 5 percentage points. Growth in physician payments of 1 or 2 percentage points above real GDP growth was thought to be a realistic goal that would improve the affordability of those payments but allow for growth in medical capabilities.

Calculation of the conversion factor update. Conversion factor updates are calculated as the product of the update adjustment factor and Health Care Financing Administration's (HCFA's) estimate of the change in the MEI. To prevent large changes in the conversion factor in any given year, the sustainable growth rate system limits the size of annual updates to 3 percentage points above the MEI and 7 percentage points below. Although this could lead to spending above or below the allowed amount during a year, any differences between actual and allowed spending would be made up in subsequent years because updates are based on accumulated spending since 1997.

## Changes in use of needed services

The sustainable growth rate system is used to calculate annual updates to the Medicare Fee Schedule conversion factor. It bases the updates on increases in the prices of inputs used to produce physicians' services, as measured by the Medicare Economic Index (MEI), but only to the extent that growth in total expenditures for physicians' services is consistent with the sustainable growth rate. In this way, the system aims to preserve beneficiary access to needed physicians' services while maintaining the affordability of those services.

The Commission believes that changes in Medicare fee-for-service enrollment and growth in real gross domestic product (GDP) per capita may not adequately address the factors that will affect beneficiary use of needed services in the coming years.

With respect to fee-for-service enrollment, demographic shifts in the beneficiary population, in addition to changes in the number of enrollees, are likely to affect expenditures for physicians' services. Those demographic shifts include the aging of the population and the approaching Medicare eligibility of the baby boom generation starting in 2011. Growth in beneficiary enrollment in Medicare+Choice plans could also change the composition of fee-for-service enrollment.

Within the SGR, the Commission is concerned that the factor of growth in real GDP per capita may not be sufficient to allow for improvements in medical capabilities and advancements in scientific technology that are characteristic of health care (Newhouse 1993).

### RECOMMENDATION 7E

The Congress should revise the SGR to include measures of changes in the composition of Medicare feefor-service enrollment.

The demographic characteristics of

Medicare fee-for-service enrollment changed during a recent 5-year period (see Table 7-2). From 1993 to 1997, beneficiaries in the 65-to-74 age group decreased as a percentage of total fee-forservice enrollment, from 47.1 percent to 43.7 percent. At the same time, all other age groups increased as a percentage of the total. Mortality rates also showed a small increase, from 4.8 percent to 5.0 percent.

Reasons for the change in the age distribution of fee-for-service enrollment need to be analyzed further. Growth in two age groups—age 75 to 84 and age 85 and over—could be due in part to increases in longevity. Shifts in beneficiary enrollment from fee-for-service to managed care is another possibility. From 1993 to 1997, managed care enrollment among Medicare beneficiaries increased from 7.1 percent to 15.0 percent.

Demographic changes in fee-forservice enrollment can lead to changes in spending for physicians' services (see Table 7-3). For example, the decrease in the percentage of beneficiaries in the 65to-74 age group will increase overall spending per beneficiary because average monthly payments for physicians' services for that age group are relatively low. On the other hand, the increase in disabled beneficiaries under the age of 65 will tend to lower overall spending per beneficiary because average payments for that group are the lowest among all the age groups we considered.

Recent experience suggests that the effects of demographic changes in feefor-service enrollment may be relatively small, however. The change in the composition of fee-for-service enrollment from 1993 through 1997 led to about a 0.6 percent increase in physician payments per beneficiary over the five year period, or about 0.1 percent per year.5 Of course, such effects could become larger if, for example, growth in beneficiary enrollment in Medicare+Choice plans accelerates.

A quantity index, holding constant average monthly physician payments, was used to measure the increase in physician payments from 1993 to 1997. Quantities were measured in terms of percentages of beneficiaries with different combinations of the age, sex, and decedence characteristics discussed.

# Composition of fee-for-service enrollment by age, sex, and decedence, 1993-1997

			Year			Difference
	1993	1994	1995	1996	1997	between 1993 and 1997
Age						
Under 65	15.4%	15.7%	16.2%	16.6%	16.8%	1.4%
65-74	47.1	46.5	45.8	44.8	43.7	- 3.4
75-84	28.1	28.2	28.3	28.6	29.2	1.1
85+	9.4	9.6	9.8	10.0	10.3	0.9
Sex						
Male	42.1	42.2	42.2	42.3	42.2	0.1
Female	57.9	57.8	57.8	57.7	57.8	- 0.1
Died						
No	95.2	95.2	95.1	95.0	95.0	- 0.2
Yes	4.8	4.8	4.9	4.9	5.0	0.2

Note: Percentages within beneficiary categories may not sum to 100 due to rounding. Source: MedPAC analysis of Medicare enrollment files, 5 percent sample of beneficiaries.

In the interim, adjustments in the SGR for changes in the composition of fee-for-service enrollment may not be necessary every year. Periodic adjustments, perhaps every five years, might be adequate pending larger demographic shifts in enrollment patterns.

A further improvement for the SGR system relates to trends in the growth of beneficiary use of services. Those trends suggest that the SGR may not include an adequate allowance for improvements in medical capabilities and advancements in scientific technology. During the period 1985 to 1991, before the Medicare Fee Schedule was introduced, growth in beneficiary use of services averaged 6.9 percent per year and ranged from 3.7 percent to 9.3 percent (see Figure 7-1). This volume growth exceeded growth in real GDP per capita in each of those years. In some cases, the difference was 7 percentage points or more.

### RECOMMENDATION 7F

The Congress should revise the SGR to include a factor of growth in real gross domestic product per capita plus an allowance for cost increases due to improvements in medical capabilities and advancements in scientific technology.

While growth in beneficiary use of services has slowed in recent years, both in absolute terms and relative to real GDP growth, this slowdown may be transitory. Projections from HCFA actuaries show increases in the volume of physicians' services starting in 2001 because of an aging fee-for-service population, greater use of specialists and more expensive techniques, and other factors (Board of Trustees 1998). From 2001 to 2008, the average annual rate of growth in the volume of physicians' services is expected to be 3.6 percent, according to the actuaries' projections. That average is 1.6 percentage points more than the 2.0 percent average for 1992 to 1996. It is also higher than Congressional Budget Office (CBO) projections of real GDP per capita growth for 2001 to 2009, which range from 1.4 percent to 1.6 percent. An allowance in the SGR, in addition to real GDP growth, would help the rate accommodate future increases in the volume of physicians' services. Such an allowance would also make the SGR consistent with MedPAC's hospital update framework that includes a factor for scientific and technological advances (see Chapter 3).

Another improvement for the SGR system relates to a provision of the BBA.

Before passage of the BBA, the Secretary of Health and Human Services was required to make a conversion factor update recommendation to the Congress by April 15 of every year. One of MedPAC's predecessor commissions, the Physician Payment Review Commission (PPRC), was then required to comment on the Secretary's recommendation and make its own recommendation by May 15. These recommendations, from the Secretary and PPRC, were necessary to implement the volume performance standards (VPS) system used to update annually the Medicare Fee Schedule conversion factor before passage of the BBA.

When the BBA replaced the VPS system with the SGR system, it eliminated the requirements for consideration of conversion updates in the spring of each year. Now, HCFA publishes the updates in the fall of every year, with no opportunity for stakeholders to review and comment before their implementation.

## RECOMMENDATION 7G

The Congress should amend a provision of the BBA to require the Secretary to publish an

### Average monthly payments for physicians' services by age, sex, and decedence, fee-for-service enrollees, 1993-1997

	Year						
	1993	1994	1995	1996	1997		
Age							
Under 65	\$86.01	\$96.76	\$106.24	\$108.00	\$109.67		
65–74	92.52	104.14	112.76	113.78	118.31		
75–84	119.54	134.19	145.21	145.59	151.19		
85+	119.00	134.64	145.59	144.43	150.92		
Sex							
Male	105.81	119.42	129.60	131.18	136.22		
Female	98.53	110.69	120.04	120.46	125.14		
Died							
No	85.98	97.01	105.22	105.79	109.26		
Yes	411.59	459.80	489.75	495.03	522.15		
All	101.59	114.37	124.07	124.99	129.81		

Source: MedPAC analysis of Medicare claims and enrollment files, 5 percent sample of beneficiaries.

## estimate of conversion factor updates by March 31 of the year before their implementation.

Publication of estimates of conversion factor updates and the data upon which they are based in the spring of each year would allow MedPAC to review and comment on them before the final updates are published. MedPAC could then advise the Congress on the updates as necessary.

## SGR technical issues

A HCFA notice announcing the SGR for the 1999 fiscal year (FY) discussed two technical issues pertaining to the data used to implement the SGR system (HCFA 1998b). The first issue involves time lags between measurement periods applicable to the different SGR system calculations. The second issue concerns HCFA's ability to update estimates used in the system as more recent data become available.

Time lags between measurement periods. Data from various measurement periods are used in the SGR system. As discussed in HCFA's FY 1999 SGR notice, time lags between these measurement periods can lead to oscillation in conversion factor updates. HCFA simulations have shown that the time lags cause the updates to swing sharply between its limits of MEI plus 3 percentage points and MEI minus 7 percentage points. Such oscillation, an artifact of the structure of the system, undermines the validity of the updates.

To illustrate the importance of the mismatches in measurement periods, the Commission simulated conversion factor updates for the next 10 years, from 2000 through 2009 (see Appendix E). The results of the simulations are consistent with HCFA's and show that the agency's concerns about the SGR's time lags are well founded (see Figure 7-2). If the volume and intensity of services per beneficiary increase by 2 percent a year, a change that is consistent with Medicare's experience since the fee schedule was introduced in 1992, conversion factor updates will begin to oscillate in 2004 between a maximum increase of 5.3 percent and maximum decrease of -4.7 percent.

The oscillation in conversion factor updates is caused by the mismatch of time periods between the update adjustment factor and the conversion factor update. An update adjustment factor is calculated in terms of expenditures during a year that ends on March 31. It determines a conversion factor update applicable to a calendar year. Since actual expenditures during the year on which the update

adjustment is based are unlikely to equal actual expenditures during the year when the conversion factor update occurs, the update adjustment will almost always be too high or too low. Subsequent rounds of update adjustments and conversion factor updates attempt to correct these errors while producing still more errors. The result is extreme oscillation in conversion factor updates.

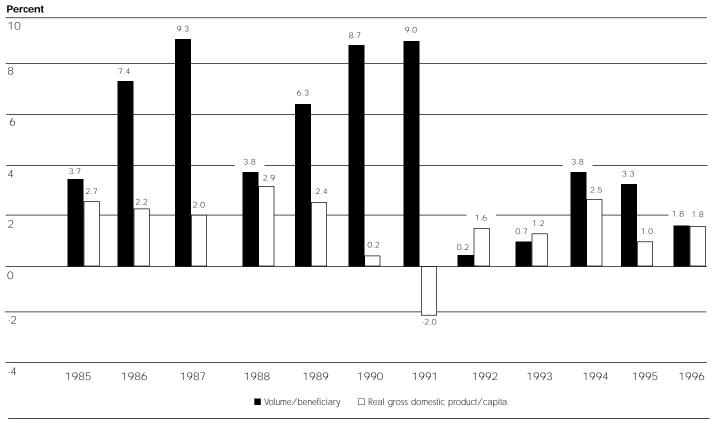
### RECOMMENDATION 7H

The Congress should reduce time lags between SGR measurement periods by allowing calculation of the SGR and update adjustment factors on a calendar year basis.

Reducing the oscillation in conversion factor updates requires eliminating time lags in the SGR system where possible. One way to reduce these time lags is to put all components of the SGR system on a calendar year basis. To be consistent with conversion factor updates, the SGR and the update adjustment factor should be calculated for calendar years.

To carry out this recommendation, HCFA would need to estimate expenditures from the last year for which data on actual expenditures are available through the calendar year when a conversion factor update is to be

# Growth in volume and intensity of physicians' services per beneficiary and growth in real gross domestic product per capita, 1985-1996



Source: Board of Trustees, Federal Supplementary Medical Insurance Trust Fund, 1998; and Council of Economic Advisers, 1998.

implemented. Commission simulations show that, with such estimation, oscillation in conversion factor updates can be reduced (see Figure 7-2).

While a calendar year SGR system would reduce the potential for oscillation in conversion factor updates, some volatility in the updates may still be possible. For example, sensitivity analysis of a calendar year SGR system shows that a relatively large, one-time increase in the volume and intensity of physicians' services can produce oscillation in the updates over a number of years as the updates are constrained by the limits of 3 percentage points above MEI and 7 percentage points below MEI (see Appendix E). The analysis also shows that removing the limits will not eliminate the oscillation and could lead to large changes in the conversion factor.

Further work is necessary to explore improvements in the SGR system beyond putting its calculations on a calendar year basis. So far, the Commission's work on improving the system has been limited to minimal modifications of the current system. Additional work may show that alternative methods could be implemented that would reduce the potential for oscillation in conversion factor updates even in years after relatively large increases in the volume of services. The Commission plans to pursue this work during the coming year.

Correction of estimates. The changes in spending due to fee increases, fee-for-service enrollment, real GDP per capita, and laws and regulations that make up the SGR are all based on HCFA estimates. As discussed in the FY 1999 SGR notice, these estimates are subject to error. For

example, as the new Medicare+Choice options are implemented, HCFA may find that its initial estimates of changes in fee-for-service enrollment were too high or too low. HCFA believes that the 4.3 percent decrease in fee-for-service enrollment included in the SGR for FY 1999 could be off by as much as 1 percentage point, erroneously reducing aggregate fee schedule payments by about \$400 million in the year 2000.

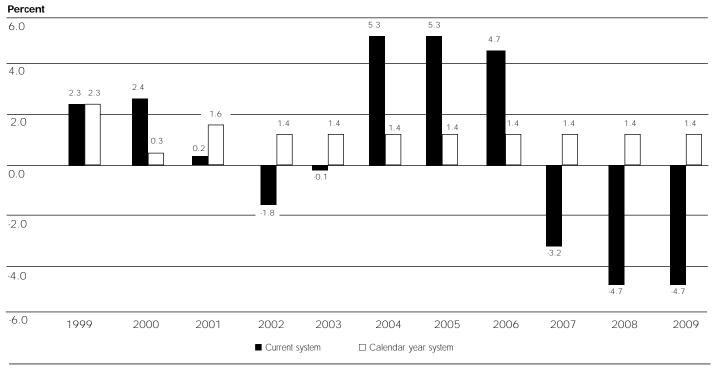
### RECOMMENDATION 71

The Congress should require the Secretary to correct estimates used in SGR system calculations every year.

HCFA could reduce potential problems with SGR estimates by correcting the estimates as better data become available.

<sup>7</sup> There is no beneficiary coinsurance for home health services or clinical laboratory services.

### Simulated conversion factor updates under the current sustainable growth rate system and a calendar year SGR system



Source: MedPAC analysis of unpublished HCFA data

For example, if fee-for-service enrollment actually declines by only 3.3 percent during FY 1999, instead of the 4.3 percent decline HCFA has projected, the FY 1999 SGR could be revised upward along with any allowed expenditure amounts calculated with that SGR. Since the SGR system is cumulative, the revisions would be reflected in subsequent conversion factor updates.

While HCFA understands the importance of this problem, the agency has concluded that it does not have the authority to correct SGR estimates as

better data become available. While the BBA calls for calculation of the SGR with the Secretary's estimate of changes in fee-for-service enrollment and other factors, the law does not include explicit provisions that allow later revision of the Secretary's estimates with better data.

If HCFA corrects projection errors in SGR system calculations, conversion factor updates will better reflect the factors that influence Medicare's expenditures for physicians' services. In the absence of these corrections, projection errors will be compounded

over time given the cumulative nature of the system. If the system is changed to a calendar year system, correcting projection errors will become even more important because a calendar year system will be more dependent on estimates than the current one.

This recommendation is consistent with one made by PPRC (PPRC 1997). It is also consistent with MedPAC's correction of forecast errors in the hospital market basket (see Chapter 3).

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